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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

Thomas E. Saulpaugh, et al.

Serial No. 09/653,610

Filed: August 31, 2000

For: **METHOD AND APPARATUS  
TO OBTAIN NEGOTIATED  
SERVICE ADVERTISEMENT**

§ Group Art Unit: 2141  
§  
§ Examiner: Nguyen, Quang N.  
§  
§ Atty. Dkt. No.: 5181-70500  
§ P5201

<p style="text-align: center;">CERTIFICATE OF MAILING 37 C.F.R. § 1.8</p> <p>I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below:</p> <p style="text-align: center;"><u>Robert C. Kowert</u> Name of Registered Representative</p> <p><u>January 11, 2005</u>      <u>[Signature]</u> Date                                      Signature</p>
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**APPEAL BRIEF**

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

Further to the Notice of Appeal filed November 15, 2004, Appellants present this Appeal Brief. Appellants respectfully request that the Board of Patent Appeals and Interferences consider this appeal.

## **I. REAL PARTY IN INTEREST**

As evidenced by the assignment recorded at Reel 011078, Frame 0116, the subject application is owned by Sun Microsystems, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and now having its principal place of business at 4150 Network Circle, Santa Clara, CA 95054.

## **II. RELATED APPEALS AND INTERFERENCES**

No other appeals, interferences or judicial proceedings are known which would be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

## **III. STATUS OF CLAIMS**

Claims 1-51 are pending. Claims 1-5, 13-22, 30-39 and 47-51 are rejected. Claims 6-12, 23-29 and 40-46 are objected to but otherwise allowable if rewritten in independent form. The rejection of claims 1-5, 13-22, 30-39 and 47-51 being appealed. A copy of claims 1-5, 13-22, 30-39 and 47-51 is included in the Claims Appendix herein below.

## **IV. STATUS OF AMENDMENTS**

No amendments to the claims have been submitted subsequent to the final rejection.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Traditional networks are complex to set up, expand and manage. For example, adding hardware or software to a network often requires a network administrator to load drivers and configure systems. Making small changes to a network configuration may require that the entire network be brought down for a period of time. Also, certain

intelligent devices may not support the necessary interfaces to communicate on a given network. The computing landscape is moving toward a distributed, Web-centric service and content model where the composition of client services and content changes rapidly. It would be desirable for such devices to be able to communicate and share resources with more powerful devices as well as thinner or less powerful devices. Also, with the advent of the Internet and resulting explosion of devices connected to the net, a distributed programming model designed to leverage this phenomenon is needed. Various clients from thick to thin and services need to be connected over the Internet, corporate Internets, or even within single computers.

Claim 1 is directed to a method for accessing a service in a distributed computing environment. As described on page 112 of the specification, a client may receive a capability credential that indicates that the client is allowed to access a portion of a first service's capabilities (*see also, e.g.*, FIGs. 41 and 43; page 13, lines 21-30; page 14, line 29 – page 15, line 3; page 107, lines 18-23; page 108, lines 1-9; page 112, lines 8-21; page 114, lines 13-23; and page 116, lines 11-25). The client may use the capability credential to request an access interface document to access the first service, for example, as described on page 108, lines 1-26 and page 15, lines 3-13 of the specification. After requesting an access interface document, the client may receive the access interface document which contains an interface for accessing only the portion of the first service's capabilities (*see, e.g.*, page 15, lines 5-13; FIG. 41, 43; page 108, lines 1-26; and page 112, lines 8-27).

Once the client has obtained the access interface document, as described above, the client may use the interface from the access interface document to access a capability from the portion of the first service's capabilities (*see, e.g.*, FIG. 41; page 113, lines 8-21; and page 116, line 18 – page 117, line 2).

Claim 18 is directed to a client device (*see, e.g.*, page 46, lines 10-20; page 122, lines 23-26) including a connection to a distributed computing environment (*see, e.g.*,

page 22, lines 5-30; page 24, lines 18-30) and an interface coupled to the connection and configured to receive over the connection a capability credential. The capability credential indicates that a client on the client device is allowed to access a portion of a first service's capabilities. Please refer to the summary of claim 1, above, for more details regarding the receiving of a capability credential indicating that a client is allowed to access a portion of a service's capabilities.

Similar to the method recited in claim 1, and summarized above, the interface of client device of claim 18 may be configured to use the capability credential to request an access interface document to access the first service. *See, e.g.*, page 108, lines 1-26 and page 15, lines 3-13.

Additionally, the interface may be configured to receive the access interface document over the connection and the access interface document may contain information for accessing only the portion of the first service's capabilities. The interface may also be configured to use the information from the access interface document to access over the connection a capability from the portion of the first service's capabilities. Please refer to the summary of claim 1 above for more information regarding the access interface document.

Claim 35 is directed to a carrier medium (*see, e.g.*, page 166, line 30 – page 167, line 5) including program instructions computer-executable on a client device, such as the client device recited by claim 18, for example. The program instructions recited in claim 35 are configured to implement functionality similar to the method recited in claim 1, discussed above. Please refer to the discussion of claim 1 above for more information.

## **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1, 18 and 35 under 35 U.S.C. § 102(e) as being anticipated by He et al. (U.S. Patent 6,088,451) (hereinafter "He").

2. Claims 2-5, 13-17, 19-22, 30-34, 36-39 and 47-51 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over He in view of Pulliam et al. (U.S. Patent 6,609,108) (hereinafter “Pulliam”).

## VII. ARGUMENT

### First Ground of Rejection:

Claims 1, 18 and 35 are rejected under 35 U.S.C. § 102(e) as being anticipated by He. Appellants traverse this rejection for at least the following reasons. Different groups of claims are addressed under their respective subheadings.

#### Claim 1:

Regarding claim 1, He fails to anticipate a client using a capability credential to request an access interface document to access a service, the client receiving the access interface document, wherein the access interface document comprises an interface for accessing only a portion of the service’s capabilities, and the client using the interface from the access interface document to access a capability from the portion of the service’s capabilities. Instead, He presents a system for *securing access* to network elements by user elements (He, Abstract). He teaches a hierarchy of tickets used for access control. He also teaches controlling access to network elements through the use of an authentication server, a credential server and a network element access server (He, column 2, lines 12-16). He does not disclose anything regarding an access interface *document* comprising an *interface* for accessing only a portion of a service’s capabilities, as the Examiner erroneously contends. The He reference is not concerned with access interface documents by which a client accesses a service. The access control credentials and tickets, such as He’s general and session tickets, are used *only for access control*, not as interface documents.

He also fails to anticipate a client using a capability credential *to request an access interface document* to access a service. The Examiner cites column 20, line 14 through column 21, line 22 of He; however, Appellants note that this passage describes He's ticket system in which a user presents a general ticket obtained from a credential server to a network element access server to receive a session ticket (He, column 20, lines 16 –19). Thus, the Examiner seems to be arguing that He's session ticket is an access interface document. However, He teaches that a general ticket, provided to a user during login, is used to obtain a session ticket that *includes a unique session encryption key* (He, column 2, lines 36-51). He's session ticket is certainly not an interface document and obtaining a session ticket cannot be considered requesting an access interface document. Nowhere does He disclose anything regarding a client using a capability credential to *request an access interface document* to access the first server. No requested credential or ticket in He is an access interface document comprising an interface for accessing only a portion of the service's capabilities. In fact, He explicitly teaches that a session ticket "is encrypted using a key derived from the password of the selected network element so that only the selected network element can verify the session ticket" (He, column 2, lines 51-55). He's session ticket is simply an authentication credential used by network elements to verify the user.

Further regarding claim 1, He also fails to teach the client receiving the access interface document, wherein the access interface document comprises an interface for accessing only said portion of the service's capabilities. The Examiner cites column 26, lines 58-65 of He, describing how a user (of He's system) selects a network element to communicate with via one or more pull-down menus. The Examiner further argues that He's pull-down menus are an access interface documents. Firstly, the Examiner seems to be arguing that both He's session ticket (as discussed in the paragraph above) and He's pull-down menus are access interface documents. It is clearly improper for the Examiner to use two disjoint interpretations of He in combination in his rejection. The Examiner is clearly attempting to combine disparate teachings from He to piece together Appellants' invention in hindsight.

Furthermore, the pull-down menus of He are not access interface documents, but are simply a mechanism by which a user may select a particular network element. The Examiner contends that when a user of He's system is given access to pull down menus to identify network elements, a client is receiving an access interface document that comprises an interface for accessing only a portion of a service's capabilities. However, He actually teaches that the user may use the pull down menus to make an access request for a particular network element (He, column 26, lines 60-62). Allowing a user to access pull down menus to select a desired network element does not constitute receiving an access interface document. The pull-down menus of He only allow a user *to select* a particular network element and do not comprise an interface for accessing only a portion of a service's capabilities, as the Examiner suggests. He uses pull-down menus only in their traditional use as user interface elements to select a specific entry. No one of ordinary skill in the art would interpret such pull down menus as an access interface document. He does not mention anything about receiving an access interface document, nor about the use of pull down menus involving any access interface document comprising an interface for accessing a portion of a service's capabilities. The Examiner has not shown any teaching in He that discloses receiving an access interface document as recited in claim 1.

The Examiner also asserts that a user (in He's system) using a pull down menu to make an access request corresponds to a client using the interface from the access interface document to access a capability from said portion of the first service's capabilities. Appellants disagree with the Examiner's interpretation of He. He teaches that once the user selects a desired network element through a pull down menu, the user element local access control system sends an access request to the network security server that "returns a session ticket to the user element for communicating with the selected network element" (He, column 27, lines 40-47). The Examiner argues that obtaining a session ticket in He equates to requesting an access interface document and that selecting a network element (from a pull down menu) in order to obtain a session ticket

corresponds to using the access interface document. However, according to He, a user *first* selects a network element and *only then* requests a session ticket for that network element. The Examiner contends that He's use of a general ticket to receive a session ticket corresponds to the element in claim 1 of the client using a capability credential to request an access interface document to access the first service, and the Examiner further contends that He's use of a pull down menu corresponds to the elements in claim 1 of the client receiving the access interface document and using the interface from the access interface document to access a capability from said portion of the first service's capabilities. However, as discussed above, He clearly teaches that a user uses the pull down menu (which the Examiner equates to using an interface from an access interface document to access a capability from a portion of a service's capabilities) to *first* select a network element for which a user *then* obtains a session ticket (which the Examiner equates to requesting an access interface document). In contrast, claim 1 recites that a user requests an access interface document and then uses the interface from the received access interface document to access a capability from a portion of a service's capabilities. Thus, not only is the Examiner's interpretation of He illogical, but when claim 1 is considered in its entirety the teachings of He cannot possibly correspond to the combination elements as related in the claim.

Further, He describes how a session ticket includes a unique session encryption key. Thus, when the user selects a network element, the user is actually performing an authentication function by presenting a general ticket in order to obtain a session encryption key with the session ticket. Hence, He teaches that a user selects a specific network element from a pull down menu to *request a session ticket and encryption key* to allow future access to the network element. Neither a session ticket nor an encryption key can be considered an access interface document. Neither includes any interface information. Instead, they are simply security control mechanisms. He does not describe requesting a session ticket as using an *interface from an access interface document* to access a capability from a portion of a service's capabilities.



Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. M.P.E.P 2131; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The identical invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). He does not teach a client using a capability credential to request an access interface document to access a service, the client receiving the access interface document, wherein the access interface document comprises an interface for accessing only a portion of the service's capabilities, and the client using the interface from the access interface document to access a capability from the portion of the service's capabilities. Thus, He clearly does not anticipate claim 1.

#### **Claim 18:**

Regarding claim 18, He fails to disclose a client device including an interface configured to use the capability credential to request an access interface document to access the first service. Instead, He presents a system for *securing access* to network elements by user elements (He, Abstract). Nowhere does He describe using a capability credential to request an access interface document. The Examiner cites column 20, line 14 through column 21, line 22 of He, however this passage describes He's ticket system in which a user presents a general ticket obtained from a credential server to a network element access server to receive a session ticket (He, column 20, lines 16 –19). He's access control credentials and tickets, such as the general and session tickets, are used *only for access control*, not as *access interface documents*. Please refer to the discussion of claim 1 above for more details regarding He's failure to anticipate using a capability credential to request an access interface document.

Further regarding claim 18, He fails to anticipate wherein the interface is further configured to receive the access interface document over the connection, wherein the access interface document comprises information for accessing only said portion of the first service's capabilities. As discussed above regarding claim 1, the Examiner argues

that He discloses receiving an access interface document by teaching how a user may gain access to pull down menus in order to choose a specific network element with which to communicate. However, the pull-down menus of He are not access interface documents, but are merely a mechanism by which a user may select a particular network element. The Examiner contends that when a user of He's system is given access to such pull down menus to identify network elements, a client is receiving an access interface document that comprises an interface for accessing only a portion of a service's capabilities. He, however, teaches that the user may use the pull down menus to make an access request for a particular network element (He, column 26, lines 60-62). Allowing a user to access pull down menus to select a desired network element does not constitute receiving an access interface document. He does not disclose anything regarding an access interface document comprising an interface for accessing only a portion of a service's capabilities, as the Examiner contends.

Please see the remarks above regarding claim 1 for a more detailed discussion regarding the Examiner's interpretation of He's pull down menus.

He further fails to disclose wherein the interface is further configured to use the information from said access interface document to access over the connection a capability from said portion of the first service's capabilities. The Examiner asserts that a user (in He's system) using a pull down menu to make an access request corresponds using the information from the access interface document to access a capability from said portion of the first service's capabilities. However, the pull-down menus of He only allow a user to *select* a particular network element and do not comprise an interface for accessing only a portion of a service's capabilities, as the Examiner suggests. He uses pull-down menus only in their traditional use as user interface elements to select a specific entry. Please refer to the discussion above regarding claim 1 for a detailed argument regarding the Examiner's interpretation of He's use of session tickets and pull down menus.

Thus, for at least the reasons give above, He clearly does not anticipate a client device comprising an interface configured to use a capability credential to request an access interface document to access a service; wherein the interface is also configured to receive the access interface document, wherein the access interface document comprises information for accessing only the portion of the service's capabilities indicated by the capability credential and wherein the interface is further configured to use the information form the access interface document to access over the connection a capability from the portion of the service's capabilities.

**Claim 35:**

Regarding claim 35, He fails to anticipate receiving a capability credential, wherein said capability credential indicates that a client within the client device is allowed to access a portion of a first service's capabilities. Instead, He presents a system for *securing access* to network elements by user elements (He, Abstract). A more detailed description of He's teachings is presented above regarding claim 1. He is not concerned with access interface documents by which a client accesses a service. The access control credentials and tickets, such as He's general and session tickets, are used *only for access control*, not as access interface documents.

He additionally does not teach using the capability credential *to request an access interface document* to access the first service. The Examiner cites column 20, line 14 through column 21, line 22 of He; however Appellants note that this passage describes He's ticket system in which a user presents a general ticket obtained from a credential server to a network element access server to receive a session ticket (He, column 20, lines 16 –19). Please refer to the discussion of claim 1, presented above, for a detailed argument regarding He's failure to anticipate using a capability credential to request an access interface document.

Further regarding claim 35, appellants submit that He also fails to teach the client receiving the access interface document, wherein the access interface document

comprises an interface for accessing only said portion of the first service's capabilities. The Examiner argues that He discloses a client receiving an access interface document by teaching how a user may gain access to pull down menus in order to choose a specific network element with which to communicate. However, the pull-down menus of He are not access interface documents, but are merely a mechanism by which a user may select a particular network element. He does not disclose anything regarding an access interface document comprising an interface for accessing only a portion of a service's capabilities, as the Examiner contends.

The remarks above, regarding claim 1, provide a detailed argument rebutting the Examiner's interpretation of He's teachings regarding receiving and using an access interface document. In short, He does not mention anything about receiving an access interface document, nor about the use of pull down menus involving any access interface document comprising an interface for accessing a portion of a service's capabilities. The Examiner has not shown any teaching in He that discloses the receiving of an access interface document.

### **Second Ground of Rejection:**

Claims 2-5, 13-17, 19-22, 30-34, 36-39, 47-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over He in view of Pulliam. Appellants traverse this rejection for the following reasons. Different groups of claims are addressed under their respective subheadings.

### **Claims 2, 3, 19, 20, 36 and 37:**

Regarding claim 2, He in view of Pulliam fails to teach wherein using a capability credential to request an access interface document comprises sending an advertisement request message in a data representation language, wherein the advertisement request message includes the capability credential. The Examiner recognizes that He fails to teach sending an advertisement request message in a data representation language, and

relies upon Pulliam to disclose this functionality. Pulliam teaches an online shopping communication schema for communication online shopping orders such as vehicle orders (Pulliam, Abstract) and has nothing to do with a client requesting an interface document comprising an interface usable by the client to access only a portion of a service's capabilities.

Pulliam teaches that a client may request a list of identifier and value pairs for a number of criteria and may use the returned values to populate pull-down lists of available automobile makes and models (Pulliam, column 13, lines 31-37). The Examiner holds that such pull-down lists are an access interface document to access the available makes and models. Appellants disagree. Pulliam never mentions anything regarding an access interface document, nor about using such pull-down lists as an access interface document that comprises an interface for accessing a portion of a service's capabilities. In contrast, Pulliam teaches that the client uses the pull-down lists and a user's selections among the pull-down lists to compile an XML message "that requests a list of matching vehicles in inventory database 612" (Pulliam, column 13, lines 37-49). Thus, rather than being an access interface document as the Examiner contends, the pull-down lists, and the data that make up such lists, are clearly just search criteria, and therefore just data, to be sent as part of a database search request.

Additionally, Pulliam fails to disclose anything regarding sending an advertisement request message. The searching of an online automobile database according to user specified search criteria in Pulliam has nothing to do with an advertisement request message. The Examiner's cited passages (Pulliam, column 14, lines 34-45, and column 15, lines 38-42) refer only to a locate server that uses PKI encrypted user credentials to provide access control. Neither of these passage teaches anything regarding sending an advertisement request message. Moreover, even though Pulliam teaches the use of XML to describe the search criteria and the corresponding search results (Pulliam, column 13, lines 25-29), Pulliam fails to teach sending an *advertisement request message* in a data representation language. Appellants submit that

sending an advertisement request message is very different than sending search criteria and search result messages in XML. Just because XML is a data representation language, does not mean that using XML for search criteria or search result messages corresponds to or suggests sending an advertisement request message in a data representation language.

Furthermore, Appellants submit that the proposed combination of He and Pulliam, as suggested by the Examiner, would not result in any system that includes sending an advertisement request message in a data representation language as part of using a capability credential to request an access interface document. Instead, such a combination would result in an online automobile search system that uses He's general and session security tickets to obtain authorization for user searches of available vehicles. Since both He and Pulliam fail to teach anything regarding using a capability credential to request an access interface and both also fail to disclose sending an advertisement request message in a data representation language, the proposed combination of He and Pulliam would not include such features.

In the Response to Arguments section of the Final Office Action, the Examiner states, "one cannot show nonobviousness by attacking the references individually where the rejections are based on combination of references." However, Appellants have clearly shown that even if He's system was modified so that a user requested a ticket by sending a request message in a data representation language, the request would still be for just a ticket, not an interface document comprising an interface usable by the client to access only a portion of a service's capabilities (See Response dated June 28, 2004, page 14, lines 10-13).

In the Response to Arguments section of the Advisory Action, the Examiner asserts that He in view of Pulliam teaches generating a custom advertisement in response to receiving an advertisement request message, and refers to Appellants' claim 2. However, none of the Examiner's arguments refer to any limitation recited in claim 2.

Thus, the Examiner has failed to 1) provide any specific argument, 2) cite any portion of He or Pulliam that teaches or suggests the limitations of claim 2, or 3) provide any specific rebuttal to the arguments above (when presented previously) regarding claim 2.

**Claim 4:**

Regarding claim 4, He in view of Pulliam does not teach generating a custom advertisement in response to receiving the advertisement request message. Additionally, He in view of Pulliam fails to disclose that the custom advertisement is generated according to the portion of the service's capabilities that the capability credential indicates the client is allowed to access, and sending an advertisement request response message to the client, wherein the advertisement request response message includes the custom advertisement as the access interface document.

The Examiner argues that, “the server [in He] generates pull-down menus to identify those *capabilities* to which the client is allowed/authorized to access” (emphasis added) citing He, column 26, lines 58-65 and Pulliam, column 13, lines 34-40). However, the pull-down menus in He and Pulliam referred to by the Examiner have nothing to do with generating a custom advertisement as an access interface document according to the portion of the service's capabilities that the capability credential indicates the client is allowed to access. He's pull down menus “identify those network elements to which [the user] is allowed access.” The cited passage of Pulliam pertains to “pull-down lists of available makes and models” which may be used to select “preferences” for “matching vehicles” as described above regarding claim 2. Pulliam's teachings have nothing to do with generating a custom advertisement according to a portion of a service's capabilities.

Furthermore, the Examiner refers to He's and Pulliam's pull-down menus as identifying *capabilities*. He, however, does not teach using pull-down menus to identify *capabilities*, but instead uses pull-down menus to identify those specific network elements with which a user may communicate (He, column 26, lines 58-65), not any

particular capabilities or portions of the capabilities of a service that a user may access. Similarly, Pulliam never describes pull-down menus as identifying service capabilities. Instead, Pulliam uses pull-down lists as one example of collected search criteria from a user (Pulliam, column 13, lines 34-37). The Examiner is clearly applying his own hindsight-based speculation to the teachings of He and Pulliam.

In his Response to Arguments section of the Advisory Action, the Examiner refers to Pulliam's lists of makes and models of available automobiles as a custom advertisement generated in response to a receiving an advertisement request message. However, Pulliam is referring to search results generated in response to user input specifying desired search criteria (Pulliam, column 15, lines 21-39). Furthermore, neither He, nor Pulliam mentions anything regarding sending an advertisement request response message to the client, wherein the advertisement request response message *includes the custom advertisement as the access interface document*. Instead, He teaches the creation of pull-down menus allowing a user to select a network element to access, and Pulliam teaches that user specified search criteria are used to generate XML messages to locate available automobiles.

He and Pulliam, both singly and in combination, fail to teach generating and sending, in response to receiving the advertisement request message, an advertisement request response message which includes a custom advertisement generated according to a portion of a service's capabilities that a client is allowed to access as indicated by a capability credential. Therefore, the rejection of claim 4 is not supported by the teachings of the cited art and withdrawal thereof is respectfully requested.

**Claims 5, 22, and 39:**

Regarding claim 5, He in view of Pulliam does not teach or suggest a custom advertisement that specifies an XML schema defining messages to be sent by the client to the service and messages to be sent from the service to the client to use the portion of the service's capabilities. The portions cited by the Examiner (Pulliam, column 15, lines 39-



43 and column 16, lines 40-50) refer to the use of XML “to support application-to-application data exchange formats.” In Pulliam, XML is used to describe the *data content* of messages, not to define the messages themselves. XML, as used by Pulliam, does not define messages to be sent by the client to the service nor messages to be sent from the service to the client to use the portion of the service’s capabilities.

In response to the above argument, the Examiner cites the same portions of Pulliam (column 15, lines 39-43, and column 16, lines 40-50) discussed above and refers to Pulliam’s use of XML to send various messages. However, Pulliam does not mention an XML schema defining messages to be sent by the client to the service, nor does he describe messages to be sent from the service to the client. Pulliam’s use of XML message to exchange data between applications does not include an XML schema defining messages. In fact, Pulliam describes the format of the messages used in his system (Pulliam, column 16, line 45 – column 17, line 29) implying that the messages are pre-defined. Pulliam teaches the use of pre-defined message and does not disclose using a XML schema defining the messages. Thus, Pulliam does not anticipate a custom advertisement specifying an XML schema defining messages.

In the Response to Arguments section the Examiner argues that Pulliam’s message client 924 provides functions to receive an XML formatted document and that generates and sends XML messages and application credentials to and from the server. However, Pulliam only teaches generating XML message from user input specifying search criteria (Pulliam, column 15, lines 25-43). Pulliam does not mention an XML schema defining messages to be sent by the client to the service and messages to be sent from the service to the client. The Examiner also argues that in Pulliam search requests may be submitted in XML messages and the responses may be received in XML. However, using messages that contain XML does not imply the use of an XML Schema to define the messages themselves.

The rejection of claim 5 is further improper because the Examiner has not

explained how the cited teachings of Pulliam (the use of XML messages to submit search requests) applies to He's system. The He reference fails to mention anything regarding XML messages, or search messages. Furthermore, the Examiner fails to explain how Pulliam suggests modifying He's system. The use of an XML schema in Pulliam to describe data to be exchanged in online shopping does not have any relevance to the access control ticket requests in He. Therefore, the combination of references is improper.

**Claims 13, 14, 30, 31 47 and 48:**

He in view of Pulliam fails to teach wherein said access interface document comprises a schema defining messages for accessing said portion of the first service's capabilities, wherein said using the interface from said access interface document to access a capability comprises sending a message according to said schema to the first service.

The Examiner cites column 16, lines 40-50 of Pulliam and argues that using a pull down list to access available information/services teaches sending a message according a schema as part of using the interface from the access interface document to access a capability of a service. However, as argued above, pull down menus do not use or comprise a schema defining messages for accessing a portion of a service's capabilities. Instead, using a pull down menu only teaches making certain user selection. Also, Pulliam teaches that his pull down menus are used to specify search criteria. Pulliam does not teach that using his pull down menus comprises sending messages specified in a schema, as the Examiner suggests.

Furthermore, the Examiner fails to explain how the cited teachings of Pulliam are combined with He's system. He's system does not include any need to specify search criteria as taught by Pulliam. The Examiner has failed to provide any motivation for combining the online ordering system of Pulliam with the secure access method of He. Also, no combination of He and Pulliam results in a method wherein the access interface

document comprises a schema defining messages for accessing a portion of the first service's capabilities, wherein the using the interface from the access interface document to access a capability comprises sending a message according to the schema to the first service, as asserted by the Examiner.

**Claims 15, 32 and 49:**

He in view of Pulliam fails to teach wherein said access interface document comprises a message schema defining messages for accessing the portion of the first service's capabilities, wherein said using the interface from the access interface document to access a capability comprises the client using the access interface document to construct a message gate for sending messages to the first service, wherein the message gate embeds the capability credential in each message.

The Examiner states, "Pulliam's message client 924 provides the required functions to receive the XML formatted document, then generates and sends the XML messages and application credentials to and from the server" and cites column 15, lines 38-43 of Pulliam. However, Pulliam's teachings do not disclose an access interface document *comprising a message schema* defining messages for accessing a portion of a service's capabilities. The Examiner has also argued, regarding claim 1, that He's pull-down menus (of network elements) is an access interface document. However, the Examiner has failed to point out any passage of He or Pulliam that discloses wherein the pull-down menus comprise a message schema defining messages, as recited in claim 15. In fact, neither He nor Pulliam ever mention any sort of access interface document comprising a message schema defining messages for accessing a portion of a service's capabilities.

Furthermore, the cited passage of Pulliam does not teach a message that embeds the capability credential in each message. Instead, the cited passage only describes how Pulliam's message client 924 provides sends and receives XML messages and application credentials to and from the locate server. Nowhere does Pulliam mention a message gate

embedding a capability credential in each message. The Examiner is merely speculating in hindsight regarding the embedding of a capability credential with every message.

**Claims 16, 33 and 50:**

Regarding claim 16, He in view of Pulliam fails to teach wherein the message gate checks each message for compliance with the message schema. The Examiner cites column 16, lines 40 – 50 of He. However, the cited portion of He, only describes He's use of a registration database and how He's authentication server 202 maintains a database of user account records. The cited passage has no relevance on a message gate that checks each message for compliance with a message schema. He does not teach anything regarding a message gate that checks each message for compliance with a message schema, as recited in claim 16. As argued above, He in view of Pulliam fails to disclose a message schema defining messages to access a portion of a service's capabilities (please refer to the arguments presented above regarding claim 5).

Thus, He in view of Pulliam fails to teach wherein the message gate checks each message for compliance with the message schema.

**Claims 17, 34 and 51:**

He in view of Pulliam fails to teach wherein the message schema is an XML schema. The Examiner only cites column 16, lines 40 – 50 of He. However, the cited portion of He (column 16, lines 40-50), only describes He's use of a registration database and how He's authentication server 202 maintains a database of user account records. The cited passage does not mention anything regarding a message schema or an XML schema. Pulliam does teach the use of messages containing XML, but fails to teach an XML message schema, as recited in claim 17. Please refer to the arguments above regarding claim 15 for a more detailed argument regarding Pulliam's failure to disclose such a message schema.

**Claim 21:**

Regarding claim 21, He in view of Pulliam fails to teach an interface configured to receive an advertisement request response message including a custom advertisement, wherein said custom advertisement is generated according to the portion of the first service's capabilities that the capability credential indicates the client is allowed to access.

The Examiner states, "generating pull-down menus to identify those *capabilities* to which the client is allowed to access" (emphasis added) citing He, column 26, lines 58-65 and Pulliam, column 13, lines 34-40). However, the pull-down menus in He and Pulliam referred to by the Examiner have nothing to do with generating a custom advertisement as the access interface document according to the portion of the service's capabilities that the capability credential indicates the client is allowed to access. He's pull down menus "identify those network elements to which [the user] is allowed access." The cited section of Pulliam pertains to "pull-down lists of available makes and models" which may be used to select "preferences" for "matching vehicles" as described above regarding claim 2. Pulliam's teachings have nothing to do with generating a custom advertisement according to a portion of a service's capabilities.

Furthermore, the Examiner refers to He's and Pulliam's pull-down menus as identifying *capabilities*. He, however, does not teach using pull-down menus to identify *capabilities*, but instead uses pull-down menus to identify those specific *network elements* with which a user may communicate (He, column 26, lines 58-65), not any particular capabilities or portions of the capabilities of a service that a user may access. Similarly, Pulliam never describes pull-down menus as identifying service capabilities. Instead, Pulliam uses pull-down lists as one example of collected search criteria from a user (Pulliam, column 13, lines 34-37). The Examiner is clearly applying his own speculation to the teachings of He and Pulliam.

Appellants submit that He and Pulliam, both singly and in combination, fail to teach generating and sending, in response to receiving the advertisement request message, an advertisement request response message which includes a custom advertisement generated according to a portion of a service's capabilities that a client is allowed to access as indicated by a capability credential. Therefore, the rejection of claim 4 is not supported by the teachings of the cited art and withdrawal thereof is respectfully requested.

**Claim 38:**

He in view of Pulliam fails to teach receiving, in an advertisement request response message, a custom advertisement in response to sending said advertisement request message, wherein said custom advertisement is generated according to said portion of the first service's capabilities that said capability credential indicates the client is allowed to access

The Examiner asserts that, "the server generating pull-down menus to identify those *capabilities* to which the client is allowed to access" (emphasis added) citing He, column 26, lines 58-65 and Pulliam, column 13, lines 34-40). However, the pull-down menus in He and Pulliam referred to by the Examiner have nothing to do with generating a custom advertisement as the access interface document according to the portion of the service's capabilities that the capability credential indicates the client is allowed to access. He's pull down menus "identify those network elements to which [the user] is allowed access." The cited section of Pulliam pertains to "pull-down lists of available makes and models" which may be used to select "preferences" for "matching vehicles" as described above regarding claim 2. Pulliam's teachings have nothing to do with generating a custom advertisement according to a portion of a service's capabilities.

Furthermore, the Examiner refers to He's and Pulliam's pull-down menus as identifying *capabilities*. He, however, does not teach using pull-down menus to identify *capabilities*, but instead uses pull-down menus to identify those specific network

elements with which a user may communicate (He, column 26, lines 58-65), not any particular capabilities or portions of the capabilities of a service that a user may access. Similarly, Pulliam never describes pull-down menus as identifying service capabilities. Instead, Pulliam uses pull-down lists as one example of collected search criteria from a user (Pulliam, column 13, lines 34-37). The Examiner is clearly applying his own speculation to the teachings of He and Pulliam.

Appellants submit that He and Pulliam, both singly and in combination, fail to teach generating and sending, in response to receiving the advertisement request message, an advertisement request response message which includes a custom advertisement generated according to a portion of a service's capabilities that a client is allowed to access as indicated by a capability credential. Therefore, the rejection of claim 4 is not supported by the teachings of the cited art and withdrawal thereof is respectfully requested.

### **VIII. CONCLUSION**

For the foregoing reasons, it is submitted that the Examiner's rejection of claims 1-5, 13-22, 30-39 and 47-51 was erroneous, and reversal of his decision is respectfully requested.

The Commissioner is authorized to charge the appeal brief fee of \$500.00 and any other fees that may be due to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-70500/RCK. This Appeal Brief is submitted with a return receipt postcard.

Respectfully submitted,



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Date: January 11, 2005



## **IX. CLAIMS APPENDIX**

The claims on appeal are as follows.

1. A method for accessing a service in a distributed computing environment, comprising:

a client receiving a capability credential, wherein said capability credential indicates that the client is allowed to access a portion of a first service's capabilities;

the client using said capability credential to request an access interface document to access the first service;

the client receiving said access interface document, wherein said access interface document comprises an interface for accessing only said portion of the first service's capabilities; and

the client using the interface from said access interface document to access a capability from said portion of the first service's capabilities.

2. The method as recited in claim 1, wherein said using said capability credential to request an access interface document comprises sending an advertisement request message in a data representation language, wherein said advertisement request message includes said capability credential.

3. The method as recited in claim 2, wherein said data representation language is eXtensible Markup Language (XML).

4. The method as recited in claim 2, further comprising:

generating a custom advertisement in response to receiving said advertisement request message, said custom advertisement is generated according to said portion of the first service's capabilities that said capability credential indicates the client is allowed to access; and

sending an advertisement request response message to the client, wherein said advertisement request response message includes said custom advertisement as said access interface document.

5. The method as recited in claim 4, wherein said custom advertisement specifies an XML schema defining messages to be sent by the client to the first service and messages to be sent from the first service to the client to use said portion of the first service's capabilities.

13. The method as recited in claim 1, wherein said access interface document comprises a schema defining messages for accessing said portion of the first service's capabilities, wherein said using the interface from said access interface document to access a capability comprises sending a message according to said schema to the first service.

14. The method as recited in claim 13, wherein said message includes said capability credential, the method further comprising the first service using said capability credential to authenticate said message as from the client.

15. The method as recited in claim 1, wherein said access interface document comprises a message schema defining messages for accessing said portion of the first service's capabilities, wherein said using the interface from said access interface document to access a capability comprises the client using said access interface document to construct a message gate for sending messages to the first service, wherein the message gate embeds said capability credential in each message.

16. The method as recited in claim 15, wherein the message gate checks each message for compliance with said message schema.

17. The method as recited in claim 16, wherein said message schema is an XML schema.

18. A client device, comprising:

a connection to a distributed computing environment;

an interface coupled to said connection and configured to receive over the connection a capability credential, wherein said capability credential indicates that a client on the client device is allowed to access a portion of a first service's capabilities;

wherein the interface is further configured to use said capability credential to request an access interface document to access the first service;

wherein the interface is further configured to receive said access interface document over the connection, wherein said access interface document comprises an information for accessing only said portion of the first service's capabilities; and

wherein the interface is further configured to use the information from said access interface document to access over the connection a capability from said portion of the first service's capabilities.

19. The client device as recited in claim 18, wherein the interface is configured to use said capability credential to request an access interface document by

sending an advertisement request message in a data representation language, wherein said advertisement request message includes said capability credential.

20. The client device as recited in claim 19, wherein said data representation language is eXtensible Markup Language (XML).

21. The client device as recited in claim 19, wherein the interface is further configured to receive an advertisement request response message including a custom advertisement, wherein said custom advertisement is generated according to said portion of the first service's capabilities that said capability credential indicates the client is allowed to access.

22. The client device as recited in claim 21, wherein said custom advertisement specifies an XML schema defining messages to be sent by the client to the first service and messages to be sent from the first service to the client to use said portion of the first service's capabilities.

30. The client device as recited in claim 18, wherein said access interface document comprises a schema defining messages for accessing said portion of the first service's capabilities, wherein the interface is configured to use the information from said access interface document to access a capability by sending a message according to said schema to the first service.

31. The client device as recited in claim 30, wherein said message includes said capability credential so that the first service may use said capability credential to authenticate said message as from the client.

32. The client device as recited in claim 18, wherein said access interface document comprises a message schema defining messages for accessing said portion of the first service's capabilities, wherein the interface is configured to use the information

from said access interface document to access a capability by using said access interface document to construct a message gate in the client device for sending messages to the first service, wherein the message gate embeds said capability credential in each message.

33. The client device as recited in claim 32, wherein the message gate is configured to check each message for compliance with said message schema.

34. The client device as recited in claim 33, wherein said message schema is an XML schema.

35. A carrier medium comprising program instructions, wherein the program instructions are computer-executable on a client device to implement:

receiving a capability credential, wherein said capability credential indicates that a client within the client device is allowed to access a portion of a first service's capabilities;

using said capability credential to request an access interface document to access the first service;

receiving said access interface document, wherein said access interface document comprises an interface for accessing only said portion of the first service's capabilities; and

using the interface from said access interface document to access a capability from said portion of the first service's capabilities.

36. The carrier medium as recited in claim 35, wherein said using said capability credential to request an access interface document comprises sending an advertisement request message in a data representation language, wherein said

advertisement request message includes said capability credential.

37. The carrier medium as recited in claim 36, wherein said data representation language is eXtensible Markup Language (XML).

38. The carrier medium as recited in claim 36, wherein the program instructions are computer-executable on the client device to further implement:

receiving, in an advertisement request response message, a custom advertisement in response to sending said advertisement request message, wherein said custom advertisement is generated according to said portion of the first service's capabilities that said capability credential indicates the client is allowed to access.

39. The carrier medium as recited in claim 38, wherein said custom advertisement specifies an XML schema defining messages to be sent by the client to the first service and messages to be sent from the first service to the client to use said portion of the first service's capabilities.

47. The carrier medium as recited in claim 35, wherein said access interface document comprises a schema defining messages for accessing said portion of the first service's capabilities, wherein said using the interface from said access interface document to access a capability comprises sending a message according to said schema to the first service.

48. The carrier medium as recited in claim 47, wherein said message includes said capability credential so that the first service may use said capability credential to authenticate said message as from the client.

49. The carrier medium as recited in claim 35, wherein said access interface

document comprises a message schema defining messages for accessing said portion of the first service's capabilities, wherein said using the interface from said access interface document to access a capability comprises the client using said access interface document to construct a message gate for sending messages to the first service, wherein the message gate embeds said capability credential in each message.

50. The carrier medium as recited in claim 49, wherein the program instructions are computer-executable on the client device to further implement the message gate checking each message for compliance with said message schema.

51. The carrier medium as recited in claim 50, wherein said message schema is an XML schema.

**X. EVIDENCE APPENDIX**

No evidence submitted under 37 CFR §§ 1.130, 1.131 or 1.132 or otherwise entered by the Examiner is relied upon in this appeal.



**XI. RELATED PROCEEDINGS APPENDIX**

There are no related proceedings.